Productsheet Verdict® 8K: T+RH datalogger

The Verdict® temperature/humidity logger 8K: T+RH is a rugged, self-sufficient system that measures temperature and/or humidity and records the result in a protected memory section. The recording is done at a user-defined rate. A total of 8192 8-bit readings are taken at equidistant intervals ranging from 1s to 273hrs can be stored. In addition to this, there are 512 bytes of SRAM for storing application-specific information and 64 bytes for calibration data. A mission to collect data can be programmed to begin immediately, or after a user defined delay or after a temperature alarm. Access to the memory and control functions can be password protected. The 8K: T+RH is configured and communicates with a host-computing device through the serial 1-Wire® protocol, which requires only a single data lead and a ground return. Every 8K: T+RH is factory-lasered with a guaranteed unique 64-bit registration number that allows for absolute traceability. The durable stainless-steel package is highly resistant to environmental hazards such as dirt, moisture, and shock. The 8K: T+RH datalogger is mounted on a PVC Card with a unique barcode printed on the the card. The Backside of the card can be used to print a customer's logo.

Key Features:

- Digital Hygrometer Measures Humidity with 8-Bit (0.6%RH) Resolution
- Operating Range: -20°C to +85°C; 0 to 100%RH (see Safe Operating Range)
- Automatically Wakes Up, Measures Temperature and/or Humidity and Stores Values in 8kB of Datalog Memory in 8- or 16-Bit Format
- Digital Thermometer Measures Temperature with 8-Bit (0.5°C) Resolution
- Temperature Accuracy Better than ±0.5°C from -10°C to +65°C with Software Correction
- Built-in Humidity Sensor for Simultaneous Temperature and Humidity Logging
- Capacitive Polymer Humidity-Sensing Element
- Hydrophobic Filter Protects Sensor Against Dust, Dirt, Contaminants, and Water Droplets/Condensation
- Sampling Rate from 1 min. up to 255 min.
- Programmable Recording Start Delay After Elapsed Time or Upon a Temperature Alarm Trip Point
- Programmable High and Low Trip Points for Temperature and Humidity Alarms
- Quick Access to Alarmed Devices Through 1-Wire Conditional Search Function
- 512 Bytes of General-Purpose Memory Plus 64 Bytes of Calibration Memory
- Two-Level Password Protection of All Memory and Configuration Registers
- Communicates to Host with a Single Digital Signal at Up to 15.4kbps at Standard Speed or Up to 125kbps in Overdrive Mode Using 1-Wire Protocol
- Individually Calibrated in a NIST-Traceable Chamber
- Calibration Coefficients for Temperature and Humidity Factory Programmed into Nonvolatile (NV) Memory

Applications / Uses

- Environmental Studies/Monitoring
- Temperature and Humidity logging in Food Preparation and Processing
- Transportation of Temperature- an Humidity sensitive Goods, Industrial Products, Warehouse Monitoring